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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,357	10/22/2001	Tatuhisa Fujii	011114	9238

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ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

NGUYEN, JIMMY

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 07/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,357

Applicant(s)

FUJII ET AL.

Examiner

Jimmy Nguyen

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22/10/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 15 and 16 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 –14 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi (US 6097202).

As to claims 1, 11, 12, Takahashi discloses (fig 1) an inspection apparatus for inspecting a conductive pattern (34) of a circuit board (32), in which a potential variation caused by applying an inspection signal to said conductive pattern (34) is detected in a non-contact manner, said inspection apparatus comprising:

Supply (46) means for supplying an temporally varied inspection signal to conductive pattern (34);

detect (50) means for detecting the potential variation in each portion of said conductive pattern (34) by use of a plurality of sensor elements (52, 54, 56, 68); and

select (SW1) means for outputting a select signal for selecting said sensor elements (52, 54, 56, 58), wherein each of said sensor elements (52, 54, 56, 58) is formed either on a single-crystal of a semiconductor or on a flat plate (50), and

each of said sensor elements (52, 54, 56, 58) includes;

a passive element (figs 2, 3A and 3B) operable as a counter electrode coupled capacitively with said conductive pattern (34) to detect the potential variation in said conductive pattern (34), and

a transistor (SW2) adapted to output a detect signal in response to said select signal which is input into said transistor (SW2), said detect signal being output from said passive element.

As to claims 2 - 8, Takahasshi discloses (fig 1) the transistor (SW2) is a MOSFET or a thin film transistor.

As to claims 9, 10, Takahasshi discloses (fig 1) the sensor elements (52, 54, 56, 58) are arranged on a sensor chip (50) in a matrix form and a conductive plate contacting the surface of passive element. (as seen in the figure).

As to claim 13, Takahasshi discloses (fig 1) shading means for preventing light from irradiating semiconductor serving as sensor elements (52, 54, 56, 58).

As to claim 14, Takahasshi discloses (fig 1)

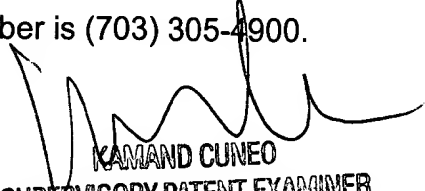
A sensor (50) for inspecting a conductive pattern of a circuit board (32), said sensor comprising a plurality of sensor elements (52,54,56,58) for detecting a potential variation caused by supplying (46) an inspection signal to said conductive pattern (34), in a non-contact manner, wherein each of said sensor elements (52,54,56,58) is formed on a single-crystal of a semiconductor, and each of said sensor elements includes;

a passive element (figs 2, 3A and 3B) operable as a counter electrode coupled capacitively with said conductive pattern to detect the potential variation in said conductive pattern (34), and a transistor adapted to output a detect signal in response to said select signal which is input into said transistor (SW2) , said detect signal being output from said passive element.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Nguyen at (703) 306-5858. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

JN.
June 24, 2003


KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800